IN THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A method for producing a heat exchanger element~~s~~ ~~(8) comprising~~including ~~a~~ a fibrous mat and at least one heat exchanging conduit ~~(2)~~ for a heat exchanging medium, wherein the heat exchanger element ~~(8)~~is ~~being~~ panel shaped~~, thus comprising~~ and includes two main surfaces ~~(7)~~ averted from each other and a peripheral surface ~~(6) which~~ connect~~s~~ing the main surfaces, ~~**characterized in**~~ ~~that~~the method comprising:

applying to the ~~at least one heat exchanging conduit (2) is laid onto a~~ fibrous mat, ~~(1),~~at one main surface, ~~and~~ a cast mass, in the form of at least one layer of a cast coating ~~(3) is applied to the fibrous mat (1)~~; and

laying onto the fibrous mat, at the one main surface, ~~so that the~~ at least one heat exchanging conduit, wherein a thickness of the at least one cast coating layer is in the range of 2 to 8 mm and the ~~(2) extends~~ at least ~~partially~~ one heat exchanging conduit is contained at least partially in the at least one cast coating layer ~~(3)~~, and wherein the at least one cast coating layer, ~~cast coating (3)~~ together with the at least one heat exchanging conduit, ~~(2)~~ adheres to the fibrous mat ~~(1)~~.

2. (Currently Amended) Method as claimed in claim 1, ~~characterized in that~~wherein at least a second layer ~~(3b)~~

of the at least one cast coating ~~(3)~~layer, ~~—~~having a different grain proportion as compared with the at least one cast coating ~~first~~ layer, ~~(3a)~~ is applied~~, the first layer (3a) having preferably a coarser grain as compared with the second layer (3b) and particularly a smaller density~~.

3. (Currently Amended) Method as claimed in claim 1~~ or 2~~, ~~characterized in that~~wherein ~~the~~ a grain proportion of the at least one layer is cured to a substantially solid cast coating ~~(3)~~ when a bonding agent is cured.

4. (Currently Amended) A heat exchanger element ~~(8)~~being panel shaped, including ~~—~~two main surfaces averted from each other and a peripheral surface connecting the main surfaces, comprising:

~~comprising~~ ~~—~~a fibrous mat;

at least one layer of a cast coating and at least one heat exchanging conduit~~at least one heat exchanging conduit (2)~~ for a heat exchanging medium at one main surface, ~~the element (8) being panel shaped, thus comprising two main surfaces (7) averted from each other and a peripheral surface (6) which connects the main surfaces, **characterized by** the production by a method according to claim 1,~~ wherein a thickness of the ~~element (8) comprises a fibrous mat (1) and a~~ cast coating ~~(3), which~~ is in the range of 2 to 8 mm and the ~~cast coating (3) adheres to the fibrous mat (1), while the~~ at least one heat exchanging conduit ~~(2) extends~~is contained at least partially in ~~said~~ the cast coating, and wherein the cast coating ~~(3)~~ together with the at least one heat exchanging conduit adheres to the fibrous mat~~and includes at least two branch necks (2a) in the region of the peripheral surface (6)~~.

5. (Currently Amended) Heat exchanger element ~~(8)~~ as claimed in claim 4, wherein the at least one heat exchanging conduit includes at least two branch necks ~~characterized in that~~, and wherein each branch neck ~~at least one of (2a) comprises~~includes a flexible plastic pipe ~~and/or is connectable to a flexible plastic pipe,~~ so that each branch neck ~~(2a) may be connected~~ is connectable to the branch neck ~~(2a)~~ of at least one of an adjacent heat exchanger element ~~(8) or~~and to a connection conduit ~~(14, 15)~~.

6. (Currently Amended) Heat exchanger element ~~(8)~~ as claimed in claim 4 ~~or 5~~, wherein ~~characterized in that~~ the fibrous mat ~~(1)~~ has a thickness of at least 25 mm~~, optionally in a range of 30, but particularly in a range of 60 mm, and comprises preferably glass fibers, rock wool, silicate fibers or fibers of plastic material~~.

7. (Currently Amended) Heat exchanger element ~~(8)~~ as claimed in ~~any of~~ claim~~s~~ 4 ~~to 6~~, wherein ~~characterized in that~~ the cast coating ~~(3) comprises~~ includes~~at least a grain proportion and a bonding agent, but preferably~~ two layers of different grain proportions, ~~particularly~~ including a first layer ~~(3a)~~ adjacent to the fibrous mat ~~(1), which has a coarse grain and, optionally a smaller density,~~ and a second layer ~~(3b)~~ applied to said first layer, wherein the second layer includes ~~(3a) comprising~~ a relatively finer grain and is~~being particularly~~ of a relatively higher density than the first layer.

8. (Currently Amended) Heat exchanger element ~~(8)~~ as claimed in ~~any of~~ claim~~s~~ 4 ~~to 7~~, ~~characterized in that~~wherein the cast coating includes at least one of ~~includes has~~ a thickness of ~~2 to 8 mm, preferably of~~ 3 to 6 mm, and ~~/or~~

~~that the cast coating comprises~~includes ~~an~~ aluminum hydroxide~~, particularly aluminum orthohydroxide~~.

9. (Currently Amended) Heat exchanger element ~~(8)~~ as claimed in ~~any of~~ claim~~s~~ ~~4 to 8~~, ~~characterized in that~~wherein the at least one cast coating layer includes ~~a relatively coarser grain than the second layer and wherein the grain proportion comprises an average grain proportion comprises~~ grains of an average particle size in the range of 0.1 to 0.5 mm~~, but preferably of 0.25 to 0.3 mm, the particle sizes varying, in particular, in the range of 0.1 to 0.5 mm, but preferably from 0.2 up to 0.4 mm~~.

10. (Currently Amended) Heat exchanger element ~~(8)~~ as claimed in ~~any of~~ claim~~s~~ ~~4 to 9~~, ~~characterized in that~~wherein the at least one heat exchanging conduit ~~(2) has~~includes an inner diameter of 0.8 to 5mm~~, preferably substantially 1 to 3mm,~~ and is ~~particularly~~ formed of at least one of plastic material~~, but optionally~~ and of metal, at least in part.

11. (Currently Amended) Heat exchanger element ~~(8)~~ as claimed in ~~any of~~ claim~~s~~ ~~4 to 10~~, ~~characterized in that~~wherein the heat exchanging conduit ~~(2)~~ extends substantially tangentially to said peripheral surface ~~(6)~~.

12. (Currently Amended) A method for assembling heat exchanger elements ~~(8) as claimed in any of claims 4 to 10, **characterized in** that~~ including a fibrous mat and at least one heat exchanging conduit for a heat exchanging medium, the heat exchanger elements being panel shaped and including at least two main surfaces averted from each other and a peripheral surface connecting the main surfaces, the method comprising:

attaching at least two heat exchanger elements ~~(8) joining~~ adjacent to each other, ~~are attached~~ to a room delimiting surface ~~(9),~~;

connecting ~~that the~~ at least two branch necks ~~(2a)~~ of a heat exchanger element ~~(8) are connected~~ to a heat exchanger circuit; and~~, that~~

applying ~~at least one covering element (12) is mounted joining a heat exchanger element (8), and that~~ a cast mixture ~~is applied at least in the region of gaps (13)~~ so that a substantially flat cast surface is obtained, wherein a thickness of the cast coating is in the range of 2 to 8 mm and the at least one heat exchanging conduit is contained ~~at least partially~~ in the cast coating, and wherein the cast coating together with the at least one heat exchanging conduit, adheres to the fibrous mat.

13. (Currently Amended) Method as claimed in claim 12, ~~characterized in that~~wherein the uncoated main surfaces ~~(7)~~ of the fibrous mats ~~(1), for fastening the heat exchanger elements (8),~~ are glued to said room delimiting surface ~~(9)~~, ~~wherein~~ and

in a first step, a first row of heat exchanger elements ~~(8)~~ are fastened with their first lateral surfaces situated side by side,

in a second step, holding elements ~~(18)~~ are mounted to join the second side surfaces,

in a third step, a second row of heat exchanger elements ~~(8)~~ are fastened so as to join said holding elements ~~(18)~~ and their first side surfaces engaging each other,

in a fourth step, the two branch necks ~~(2a)~~ of each heat exchanger element ~~(8)~~ are connected to a heat exchanger circuit,

in a fifth step, ~~the covering elements (12) are arranged at the holding elements (18),~~

~~in a sixth step, the~~a cast mixture is applied ~~at least in the region of the gaps (13),~~

~~and~~

~~preferably in a seventh~~ sixth ~~step, a flat surface is obtained by grinding,~~ and

~~whereon~~ ~~in a seventh step,~~ ~~a cover coating (3c) is optionally applied in an eighth step~~.

14. (Currently Amended) Method as claimed in claim 12, ~~characterized in that~~wherein the uncoated main surfaces ~~(7)~~ of the fibrous mats ~~(1)~~, for fastening the heat exchanger elements ~~(8)~~, are glued to said room delimiting surface ~~(9)~~, wherein

in a first step, a first row of heat exchanger elements ~~(8)~~ are fastened with their first lateral surfaces situated side by side, while spacer elements project from their second lateral surfaces,

in a second step, a second row of heat exchanger elements ~~(8)~~, their first lateral surfaces engaging each other, are fastened so that they join said second lateral surfaces and are spaced by spacer elements,

in a third step, the two branch necks ~~(2a)~~ of each heat exchanger element ~~(8)~~ are connected to a heat exchanger circuit,

in a fourth step, ~~the~~ covering elements ~~(12)~~ are arranged at the spacer elements ~~(18)~~,

in a fifth step, ~~the~~ a cast mixture is applied at least in ~~the~~ regions ~~of~~with ~~the~~ gaps ~~(13), and~~

~~preferably in a sixth step, a flat surface is obtained by grinding,~~ and

~~whereon~~ ~~in a seventh step,~~ ~~a cover coating (3c) is optionally applied in an seventh step~~.

15. (Currently Amended) Method as claimed in claim 12, ~~characterized in that~~wherein, for fastening heat exchanger

elements ~~(8)~~ comprising two parallel extending longitudinal channels ~~(22)~~ and at least one conduit ~~(2)~~ that interconnects said longitudinal channels ~~(22)~~, the uncoated main surface ~~(7)~~ of at least one fibrous mat ~~(1)~~ is glued to said room delimiting surface ~~(9)~~, at least one further element ~~(8)~~ having a layer of glue and which is oriented towards said room delimiting surface ~~(9)~~ and is placed towards another element ~~(8)~~, which has already been mounted, under a small angle to the room delimiting surface ~~(9)~~, two male parts ~~(21a)~~ are plugged into corresponding female parts ~~(21b)~~, and subsequently the connected element ~~(8)~~ having the gluing layer is fixed on said room delimiting surface.

16. (New) Method as claimed in claim 2, wherein the at least one cast coating layer includes a relatively coarser grain and a relatively smaller density than the second layer.

17. (New) Method as claimed in claim 2, wherein a grain proportion of the at least one layer is cured to a substantially solid cast coating when a bonding agent is cured.

18. (New) Method as claimed in claim 16, wherein a grain proportion of the at least one layer is cured to a substantially solid cast coating when a bonding agent is cured.

19. (New) Heat exchanger element as claimed in claim 6, wherein the fibrous mat has a thickness in a range of 30 mm and includes at least one of glass fibers, rock wool, silicate fibers and fibers of plastic material.

20. (New) Heat exchanger element as claimed in claim 6, wherein the fibrous mat has a thickness in a range of 60 mm and includes at least one of glass fibers, rock wool, silicate fibers and fibers of plastic material.

21. (New) Heat exchanger element as claimed in claim 4, wherein the at least one cast coating layer includes grains of an average particle size in the range of 0.25 to 0.3 mm.

22. (New) Heat exchanger element as claimed in claim 4, wherein the at least one cast coating layer includes grains with particle sizes varying, in particular, in the range of 0.1 to 0.5 mm.

23. (New) Heat exchanger element as claimed in claim 4, wherein the at least one cast coating layer includes grains with particle sizes varying, in particular, in the range of 0.2 to 0.4 mm.

24. (New) Heat exchanger element as claimed in claim 4, wherein the at least one heat exchanging conduit includes an inner diameter of 1 to 3mm and is formed of at least one of plastic material and of metal, at least in part.

25. (New) Method as claimed in claim 13, wherein
in a sixth step, a flat surface is obtained by grinding, and
in a seventh step, a cover coating is applied

26. (New) Method as claimed in claim 14, wherein
in a sixth step, a flat surface is obtained by grinding, and
in a seventh step, a cover coating is applied

27. (New) A room delimiting structure, comprising:

heat exchanger elements, each including

a fibrous mat, and

at least one heat exchanging conduit for a heat exchanging medium, wherein the heat exchanger elements are panel shaped and include two main surfaces averted from each other and a peripheral surface connecting the main surfaces, wherein

at least two heat exchanger elements are attached adjacently to each other to a room delimiting surface,

at least two branch necks of each heat exchanger element are connected to a heat exchanger circuit, and

a cast mixture is applied so that a substantially flat cast surface is obtained, wherein the thickness of the cast coating layer is in the range of 2 to 8 mm and the at least one conduit is contained in the cast coating, and the cast coating together with the at least one heat exchanging conduit adheres to the fibrous mat.